Steven L. Beshear
Governor

TRANSPORTATION CABINET
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Michael W. Hancock, P.E.
Acting Secretary

MEMORANDUM

Construction Memo No. 09-09

TO: Chief District Engineers
District TEBM's for PDP and Engr. Support
District Section Engineers
C.O. Division Directors

FROM: Steven Criswell, P.E. Director
Division of Construction

DATE: December 22, 2009

SUBJECT: Bridge Deck Pachometer Testing

Section 609.04.01 of the Standard Specifications requires that the cover depth of the top mat of steel reinforcement be measured in accordance with Kentucky Method 64-313. In the past Central Office Construction or District personnel had conducted these measurements. Effective immediately, Central Office Construction will be solely responsible for performing all pachometer testing. This policy change is necessary due to the poor conditions of the pachometers statewide and the exorbitant cost of associated repairs.

Districts will still be responsible for laying out the bridge decks for testing (see attached), providing traffic control, and informing their Central Office Construction District Liaison when pachometer testing is needed. The depth measurements will be conducted at the bridge's final inspection if possible. The District Liaison will be responsible to provide a written report of the results and, if necessary, contact the Division of Materials if coring is required.

District personnel are also responsible for checking the bridge deck with a rolling straight edge for variations that exceed 1/8 inch per Standard Specification 609.03.08.

If you have any questions, contact this office.

Attachment

Cc: S.Waddle
C. Knowles
FHWA
KAHC
C.O. Engrs/Techs
PAIKY

3. PROCEDURE FOR LAYING OUT GRID SYSTEM ON DECK FOR PACHOMETER READINGS:

3.1. The intent is to take the measurements on a slab grid system with points on 10-foot centers longitudinally and 5-foot centers laterally. When the slab length and width result in excess dimensions, then these excess dimensions are to be applied equally to both slab ends and both gutter-lines. These grid points are marked on the slab. Spray paint should be used if the grid will be needed for an undetermined length of time. See below.

3.2. On skewed bridges the first grid point for each grid line should be the same distance from the end of the bridge. The 5 feet distance between longitudinal lines should be at right angles to center line of bridge.

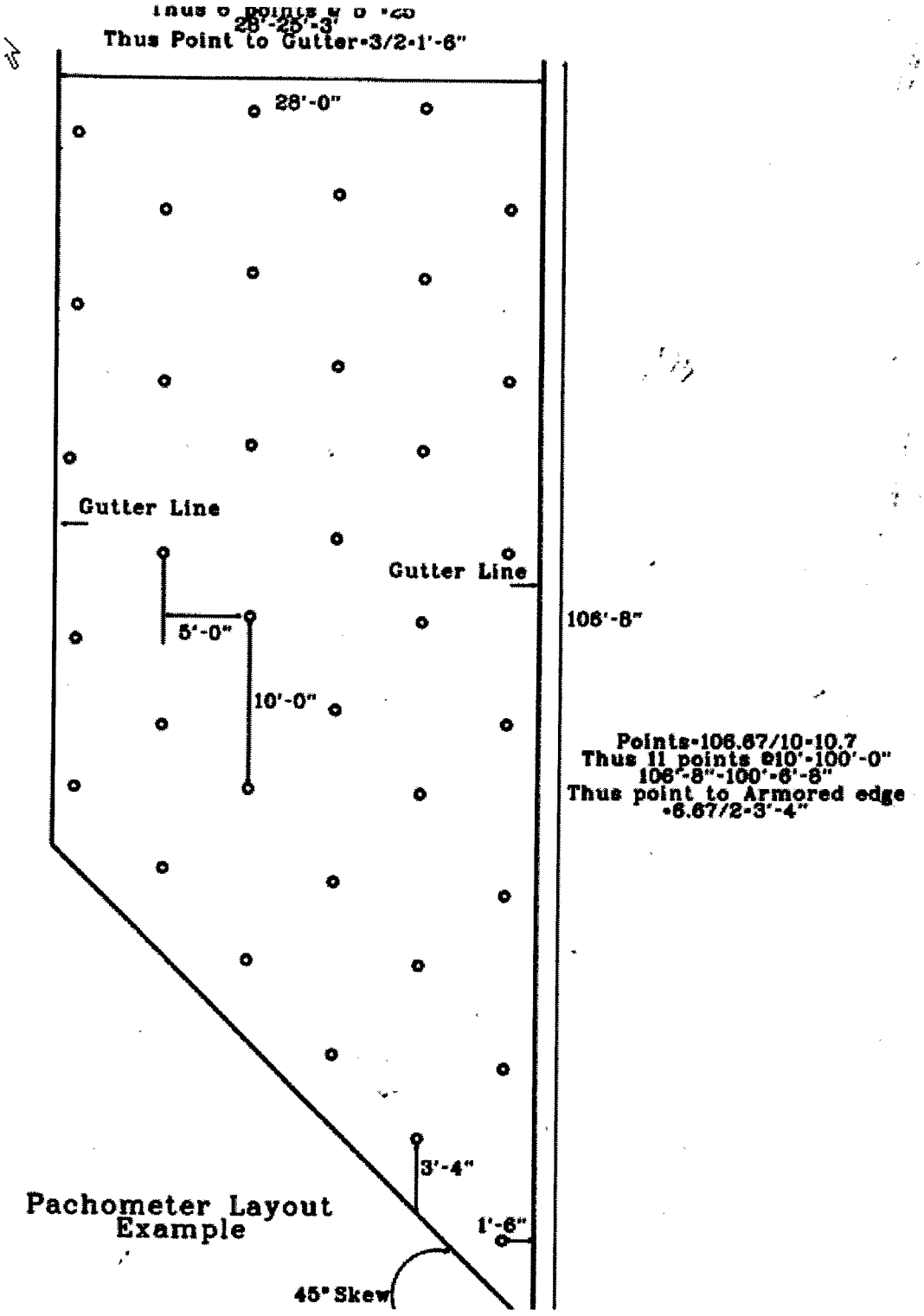
3.3. The overall length and width of the bridge slab shall be determined from plan dimensions. The slab width to be considered will extend from inside face of curb to inside face of curb. The slab length will be the "out-of-out" slab dimension indicated on the plans.

3.4 Phased Construction requires laying out the bridge as one would if it was completed deck. For instance Lines A, B, and C are in Phase 1 while Lines D, E, and F are in Phase 2. Do note in the testing where the construction joint is since that will be where the reinforcement will overlap and thus affect the pachometer readings.

3.5. The best practice is to test the bridge deck before opening it to traffic. Traffic can be allowed on phased construction projects but each phase should be tested before opening that phase to traffic.

3.6. The bridge deck is to be cleaned in such a manner that no trash, dirt, or metallic objects is present on the bridge. All construction vehicles are to be removed from the bridge to prevent interference with the pachometer. The presence of water (such as testing after a rain) is not a problem.

3.7 All work in this section is done by the District at the inspector level. Thus the District can lay out the bridge at their convenience and the person testing the bridge can do several bridges the same day.



Pachometer Layout Example